

IN THE CLAIMS

1. (currently amended) A method of changing a fragment size of data packets in a router where a data packet is divided into data packets having the fragment size, and the data packets are transmitted to a network along with audio packets, comprising the steps of:

acquiring, in the router, a parameter indicative of whether proper audio quality is maintained through ongoing transmission of the audio packets; and

dynamically changing the fragment size of the data packets in response to the acquired parameter, wherein the step of dynamically changing further includes the steps of:

comparing a current value of the parameter to an average value of the parameter;

increasing or decreasing the fragment size in relation to a default fragment size when a deviation of the current value of the parameter from the average value of the parameter exceeds a predetermined threshold for a first predetermined period of time; and

resuming the default fragment size when the deviation of the current value of the parameter from the average value of the parameter falls below the predetermined threshold for a second predetermined period of time.

2. (original) The method as claimed in claim 1, wherein said step of acquiring includes a step of measuring, as said parameter, a wait time for which the audio packets wait in the router before being transmitted to the network.

3. (original) The method as claimed in claim 1, wherein said step of acquiring includes a step of measuring, as said parameter, a delay time of the network by transmitting a hello packet to and receiving the hello packet from the network.

4. (original) The method as claimed in claim 1, wherein said step of acquiring includes a step of counting, as said parameter, a number that indicates how many times a congestion notice is received from the network during a predetermined time period to indicate congestion of the network.

5. (original) The method as claimed in claim 1, wherein said step of acquiring includes a step of acquiring, as said parameter, a number of audio calls from an apparatus that counts the number of audio calls.

6. (original) The method as claimed in claim 1, wherein said step of acquiring includes a step of acquiring, as said parameter, a number of audio calls based on signaling information.

7. (currently amended) A router apparatus for routing and transmitting audio packets along with data packets to a network, comprising:

a control unit which acquires a parameter indicative of whether proper audio quality is maintained through ongoing transmission of the audio packets; and

a fragmentation unit which divides a data packet into data packets having a fragment size, and dynamically changes the fragment size in response to the acquired parameter, wherein the fragmentation unit dynamically changes the fragment size by:

comparing a current value of the parameter to an average value of the parameter;
increasing or decreasing the fragment size in relation to a default fragment size when
a deviation of the current value of the parameter from the average value of the parameter
exceeds a predetermined threshold for a first predetermined period of time; and
resuming the default fragment size when the deviation of the current value of the
parameter from the average value of the parameter falls below the predetermined threshold
for a second predetermined period of time.

8. (original) The router apparatus as claimed in claim 7, wherein said control unit measures, as said parameter, a wait time for which the audio packets wait in the router before being transmitted to the network.

9. (original) The router apparatus as claimed in claim 7, wherein said control unit measures, as said parameter, a delay time of the network by transmitting a hello packet to and receiving the hello packet from the network.

10. (original) The router apparatus as claimed in claim 7, wherein said control unit counts, as said parameter, a number that indicates how many times a congestion notice is received from the network during a predetermined time period to indicated congestion of the network.

11. (original) The router apparatus as claimed in claim 7, wherein said control unit acquires, as said parameter, a number of audio calls from an apparatus that counts the number of audio calls.

12. (original) The router apparatus as claimed in claim 7, wherein said control unit acquires, as said parameter, a number of audio calls based on signaling information.